# Extensive Interlobular Emphysema and Abscess of the Lung, after Whooping Cough,

## IN A CHILD OF TWO MONTHS,—UNIQUE CASE.

BY

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FROM
THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES.
JULY, 1883.

[Extracted from the American Journal of the Medical Sciences for July, 1883.]

# EXTENSIVE INTERLOBULAR EMPHYSEMA AND ABSCESS OF THE LUNG, AFTER WHOOPING-COUGH, IN A CHILD OF TWO MONTHS.—UNIQUE CASE.



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PATIENT is a female, aged two months, New York Foundling Asylum. She was brought to the asylum and "given up" when one month old. Her "condition" at that time was recorded as "poor." Three days after entrance she was put out to wet-nurse in the city. Was returned in eight days by the nurse because she was "sick and cross."

From this time she was bottle-fed. She was found to be suffering from whooping-cough and diarrhœa. She gradually fell into that condition well named "marasmus," and died, aged two months, having been under observation one month.

Dr. Geo. M. Swift, house physician, states that the notable feature of this case, to distinguish it from numerous other unfortunate "marasmus babies," was its severe paroxysms of coughing, accompanied with a well-marked whoop.

*Autopsy*, Oct. 27, 1882, twelve hours after death.—*Body*, emaciated, abdomen sunken and greenish stained, excoriations about anus and buttocks. *Brain*, not examined. *Lungs*, bronchial glands somewhat enlarged, firm. Left, small area of consolidation along the posterior portion. Few scattered spots of interstitial emphysema in upper lobe and along the anterior lip of both upper and lower. These spots appear like rows of air bubbles, those at the lip assuming larger dimensions, and looking like elongated sacs. These sacs run upward toward the root of the lung, between the lobules, for an inch or more. Right, does not retract on opening the thorax. Red hepatization of nearly the whole of the lower and middle lobes. The surface of the upper lobe has an opaque, grayish, parchment-like appearance, irregularly nodulated as though composed of many variously sized air sacs crowded together.

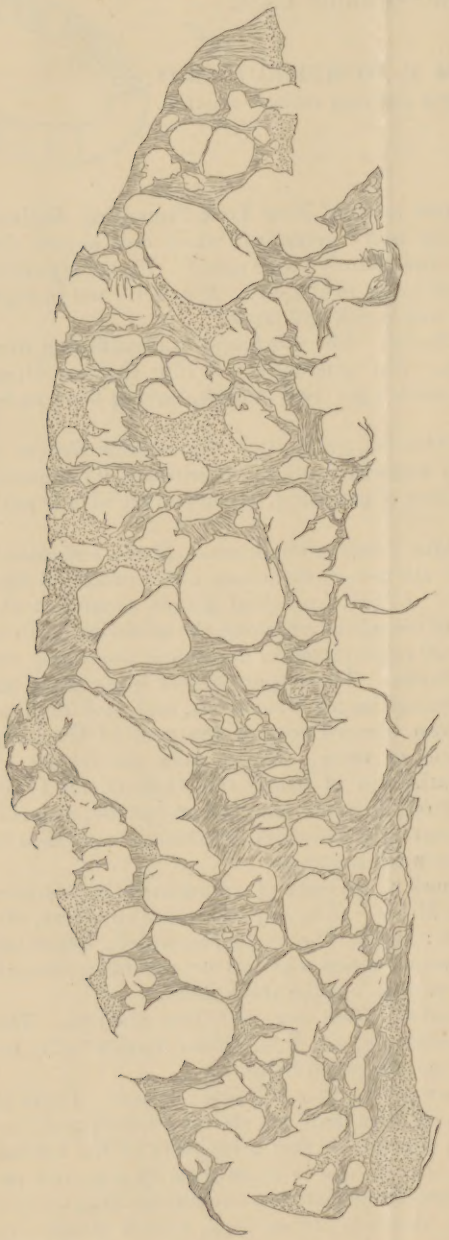
On section the upper lobe shows a labyrinth of communicating cavities varying in size from a pea to a filbert. The partitions are in places, obviously, compressed lung tissue; again fibrous bands, which, becoming thinner and thinner, either stretch across cavities or are discontinued. The colour is the same dull, brownish, opaque throughout.

In the middle lobe the departure from normal is less marked. The lobules are compressed and pneumonic, the interlobular spaces being on an average equal in size to the compressed lobules.

In the lower portion of the lower lobe it is still less marked. There is a liberal sprinkling of spherical cavities, half the size of a lentil; and besides this, a checking off of the lobules, so that a majority of the lobules are separated from their neighbours on one or more sides by a narrow interlobular fissure. No emphysema of mediastinum nor surrounding tissues.

*Heart*, normal. *Liver*, size normal, colour dark, vessels filled with dark fluid blood. Gall-bladder distended with bile, ducts pervious.

*Spleen*, size normal, colour dark. *Kidneys*, urates in tubules, size and markings normal. *Stomach*, post-mortem softening. *Intestines*, mesenteric glands enlarged uniformly throughout. Whole abdominal cavity has a greenish washed-out appearance. Small, contents tenacious, greenish mucus. Mucous membrane gray and sodden. Peyer's patches not prominent. Large, contents mucus and flakes of yellowish material. Membrane gray and sodden. Solitary follicles pigmented.



Interlobular emphysema; transverse section of upper lobe. Enlarged one diameter.

*Microscopic Appearances.*—To describe the lesions in order of prominence:—

*First.* Interlobular emphysema. At the angles of junction of the partitions above described, there are to be seen compressed air vesicles. Even this likeness to normal lung is of rare occurrence in the upper half of the upper lobe. Removed from the angles the tissues are more and more compressed laterally till there remains simply a band of connective tissue.

*Second.* Along the lower border of the upper, and throughout the middle and most of the lower lobes there exist interlobular spaces and pneumonia together. The pneumonia is characterized by an excess of pus. The bronchi and cells walls are extensively infiltrated with it, while in many of the alveoli no epithelial elements are found, and little or no fibrin.

*Third.* In this portion of the lung there exists a peculiar condition. Many of the interlobular spaces are filled with pus and fibrin in varying proportions. These lakes of pus are large enough to be seen by the unaided eye in an ordinary section. Besides these lakes of pus there are beginning abscesses from breaking down of lung tissue.

*Fourth.* Dilated lymph spaces beneath the pleura. In the subpleural tissue there

are seen tortuous, irregularly dilated canals, which from their course and from the structure of their walls, seem to be lymph vessels. These can be traced down into the interlobular tissue in several cuts.

*Fifth.* Ordinary recent broncho-pneumonia. This is most abundant in lower lobe and skirting the lesions mentioned above.

*Sixth.* Last and least, a few patches of normal lung in the lower lobe.

We have then a case of extensive interlobular emphysema occurring in, and probably due to, severe whooping-cough. Complicating this is suppurative interstitial inflammation. The latter process was certainly advancing at the time of death.

All modern authors speak in a general way of the possibility of interlobular emphysema as result of whooping-cough.

After a long and careful search, the writer is unable to find anywhere in the literature of emphysema the record of a case similar to the present. Many are reported of sudden emphysema, showing in the neck, and some, in which on autopsy, emphysema of the mediastina was found.

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